Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in this application.

Listing of Claims:

1. (Currently amended) Method of determining the adhesion properties of ~~at least two materials to one another, in particular of determining the adhesion properties of~~ at least one coating or film of at least one first material to a substrate of a second material comprising,

charging ~~wherein, at least one material, preferably at least one~~ said coating or film~~, is charged~~ with at least one absorbate and determining at least partially, at least one critical physical or chemical parameter ~~is determined~~ at which said ~~the materials, preferably at least one~~ coating or film[[,]] detaches from ~~one another, preferably from~~ the substrate~~, at least partially, in particular substantially completely~~.

2. (Original) Method according to claim 1, wherein the critical parameter is the amount of absorbate charged.

3. (Original) Method according to claim 1, wherein the critical parameter is the substrate curvature resulting where appropriate from charging with the absorbate.

4. (Currently amended) Method according to claim 1, wherein the method steps are implemented at least twice~~, in particular multiply,~~ and ~~at least one material factor, in particular~~ the thickness of the coating or film[[,]] is varied.

5. (Original) Method according to claim 1, wherein the critical parameter is used to determine the quantity known as the adhesion energy.

6. (Currently amended) Method according to claim 5, wherein the adhesion energy is determined by determining the slope of a plot of the critical parameter against ~~a function, preferably~~ the reciprocal root~~, of the material factor, in particular the thickness~~ of the thickness of the coating or film.

7. (Original) Method according to claim 1, wherein the thickness of the coating or film is low relative to the thickness of the substrate.

8. (Currently amended) Method according to claim 1, wherein the relationship Es^2/d is between 10^8 Pa·m and 10^{14} Pa·m, ~~preferably between 10^{10} Pa·m and 10^{13} Pa·m,~~ where E is the elasticity modulus of the substrate, s is the thickness of the substrate and d is the thickness of the coating or film.

9. (Currently amended) Method according to claim 1, wherein ~~the material factor, in particular~~ the thickness of the coating or film~~, and/~~or the thickness of the substrate is between 1 nm and 5 mm.

10. (Original) Method according to claim 9, wherein the thickness of the substrate is between 1 μm and 5 mm and the thickness of the coating or film is between 1 nm and 1 μm.

11. (Original) Method according to claim 1, wherein the absorbate is at least one liquid.

12. (Original) Method according to claim 11, wherein the absorbate is water.

13. (Currently amended) Method according to claim 11, wherein the absorbate is ~~an organic solvent, in particular~~ dichloromethane or tetrachloromethane.

14. (Original) Method according to claim 1, wherein the absorbate is at least one gas.

15. (Original) Method according to claim 14, wherein the absorbate is carbon dioxide.

16. (Currently amended) Method according to claim 14, wherein the absorbate is ~~a gaseous element, in particular~~ hydrogen.

17. (Original) Method according to claim 1, wherein charging with the absorbate takes place directly from the liquid phase or gas phase.

18. (Original) Method according to claim 1, wherein charging with the gas takes place by electrochemical charging.

19. (Currently amended) Method according to claim 1, wherein the first material, ~~in particular the material of the coating or film,~~ is a metal~~, in particular a noble metal~~.

20. (Currently amended) Method according to claim 1, wherein the first material~~, in particular the material of the coating or film,~~ is a polymer material~~, in particular a coating material~~.

21. (Currently amended) Method according to claim 1, wherein the second material~~, in particular the substrate,~~ is a polymer material.

22. (Currently amended) Method according to claim 1, wherein the second material~~, preferably the substrate,~~ is a metal.

23. (Currently amended) Method according to claim 1, wherein in order to determine the critical parameter the detachment process ~~of the two materials, in particular~~ of the coating or film from the substrate[[,]] is monitored optically~~, in particular~~ by using a light microscope.

24. (Currently amended) Method according to claim 1, wherein in order to determine the critical parameter in the detachment process ~~of the two materials, in particular~~ of the coating or film from the substrate, the surface roughness is monitored~~, in particular~~ by determination of the surface reflectivity [[and/]]or of the surface scattering behaviour.

25. (Original) Method according to claim 1, wherein at least one coating/film which absorbs the absorbate is firmly connected to at least one further coating/film which does not absorb the absorbate, or which absorbs it only at a low concentration, and by charging the coating/film which absorbs the absorbate with the absorbate the adhesion properties of the coating/film which

does not absorb the absorbate or which absorbs it only at a low concentration to the substrate is determined.

26. (Currently amended) Method according to claim 1, wherein for the determination of the adhesion properties, including the substrate, a layer construction of from two to four~~, preferably two or three,~~ layers is provided.